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Dairy Farm Business Summary

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NOVA SCOTIA DAIRY FARM

BUSINESS SUMMARY REPORT

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PREFACE

The 1983 Nova Scotia Dairy Farm Business Summary is a synopsis of the business performance of one hundred and thirty (130) Nova Scotia Dairy Farms. The majority of these farms participated in the CanFarm Records Program in 1983.

The farms used in this summary were not selected on a random sample basis. Instead, farmers volunteered to have their data included in the summary. Hence, care should be exercised in the use and interpretation of the results shown in the various tables of this publication.

Despite this limitation, this publication can be used by farmers to compare their individual results with group average figures for farms with similar characteristics. Such comparison can provide the farm manager wth useful information that can be used in management decisions. However, the best information is the farmers own records and comparison of these from year to year.

We gratefully acknowledge the co-operation of the one hundred and thirty (130) dairy producers who participated in this summary. Without their co-operation and data, no summary would be possible.

We further acknowledge the efforts of Debbie Freeman, Farm Management Technician who prepared the data for this summary; Shelley Manning, Farm Management Technician who collected part of the data; Fred Works, who prepared the Computer Program used in the analysis and Tracey Mitchell for the secretarial work in preparing the summary.

JUNE 1983

Rollie L. Hayman, Supervisor
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Section A

Introduction

INTRODUCTION

The Nova Scotia Dairy Farm Business Summary is designed to provide bench-mark information that can be used to compare the financial strength and weakness of individual dairy farms with similar characteristics. Farm Business Analysis is an important function of the farm manager-operator. When analysing the farm business, you must ask meaningful questions regarding the costs, incomes, efficiencies and capital investment found in your business. This summary is designed to assist you with those questions and to provide you with basic information for comparison purposes. By identifying the strengths of your business and building on these, you should be able to enhance the profit picture of your farm business. By identifying the weaknesses of your business and taking corrective action, the profit picture should also be improved.

Standards of performance and business progress are matters of personal choice and family goal setting. Each farm situation will have a different set of goals or objectives - a different set of values that you feel must be met through the farm business. It is for each of you to identify these and then compare your performance in achieving these objectives.

There are several ways that you can compare your farm performance. These include:

- You can compare your performance this year to that of last year. This perhaps is the best comparison. Have you progressed in reaching the goals you have set for your farm business.

- You can compare your performance with group average data for farms of similar size and general characteristics. This report may be useful in this regard.

- You can compare your performance to that found by research - realizing that the research data was obtained under a special set of conditions.

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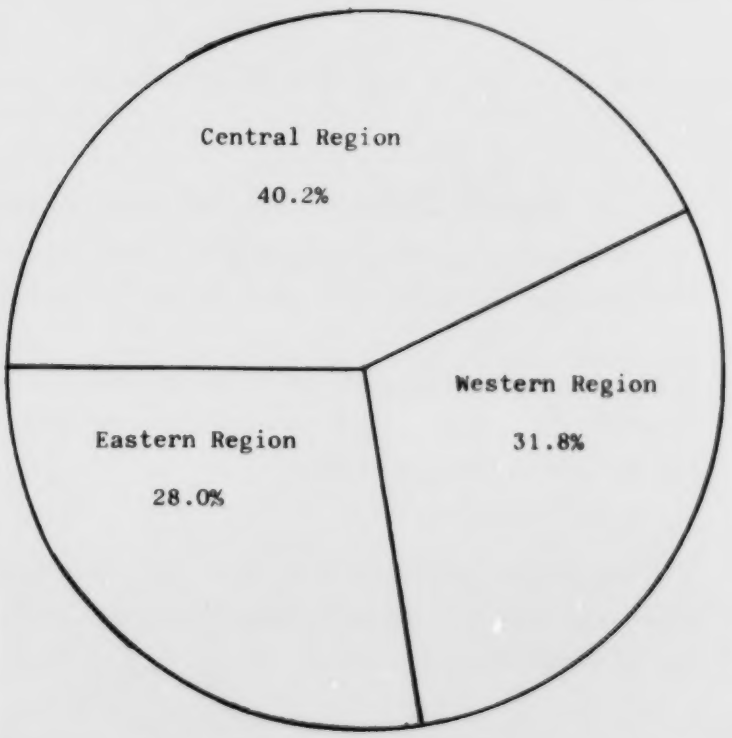
In 1983, there were a total of 630 fluid milk producers in Nova Scotia. Basic data for this summary was prepared from 130 of these farms located throughout Nova Scotia. These 130 farms represent 20.6 percent of the total number of fluid milk farms in the province.

In terms of production, the farms included in the summary produced 43,073,550 litres of milk for sale. The total milk produced by fluid milk farms in the province was 164,336,357 litres. Hence, in terms of production, farms included in this summary produced 26.2 percent of the milk produced by fluid milk farms in Nova Scotia.

Figure A-1 provides information on the distribution of these one hundred and thirty (130) farms relative to their location in the province. A description of the counties contained in each region can be found following Figure A-1.

FIGURE A-1: DISTRIBUTION OF 130 DAIRY FARMS BY REGION WITHIN NOVA SCOTIA



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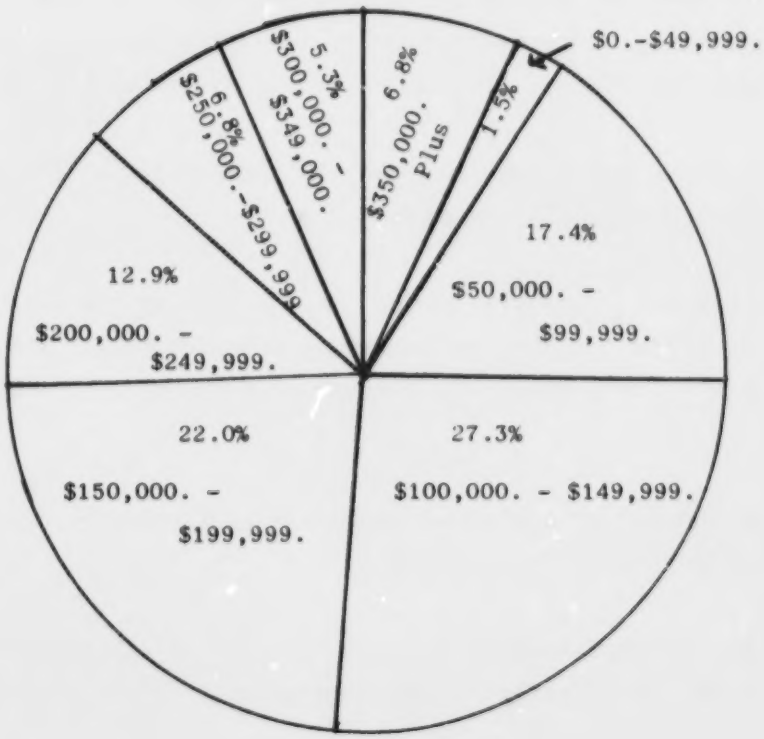
Central Region: Represents dairy farms from Colchester, Cumberland, East Hants, Halifax and Pictou Counties.

Eastern Region: Represents dairy farms from Antigonish, Cape Breton, Inverness and Victoria Counties.

Western Region: Represents dairy farms from Annapolis, Kings, Lunenburg, West Hants and Yarmouth Counties.

Figure A-2 provides information on the distribution of these one hundred and thirty (130) dairy farms relative to the size of business measured in terms of Gross Farm Income.

FIGURE A-2: DISTRIBUTION OF 130 DAIRY FARMS BY GROSS FARM INCOME



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The one hundred and thirty (130) dairy farms in the summary were classified into four (4) groups according to herd size. These groups were (1) 20-39 Cows, (2) 40-59 Cows, (3) 60-99 Cows and (4) 100 Plus Cows. The basic format for the presentation of information in this summary is as follows for Sections "B" through "F".

1. Receipts
2. Expenses
3. Income Summary
4. Net Cost of Production
5. Production Analysis
6. Balance Sheet
7. Balance Sheet Analysis
8. Labor Analysis
9. Analysis of Expenses
10. Receipts and Expenses Summary

Sections "G" through "I" provide additional information on the one hundred and thirty (130) dairy farms by reclassifying these farms on the basis of Net Farm Income, Production and Investment Levels per cow.

Section "J" provides a summary of various production and management factors found throughout this summary.

The Appendix contains comparison figures for the total group based on a per farm, per cow, per hectolitre, per hundredweight and percentage analysis basis. In addition, a Glossary of Terms used in the summary is provided.

Throughout the analysis, several assumptions were made and used that should be noted. These include:

(a) Tax depreciation was used in place of management depreciation. This may result in slightly "higher than normal" depreciation figure in this summary.

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(b) Operator labor value must be considered minimal. The value chosen was the 1982 figure plus 7 percent in all size groups.

(c) Investment figures used were farmers book values. These may or may not represent cost. They may or may not represent market value. Rather, some mixture of the two concepts may be more representative in many instances.

(d) Interest on Equity was calculated using a 10 percent interest rate.

Given the above explanatory notes, the basic data was then prepared. Throughout the summary, per farm and per cow figures are presented.

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Section B

Unit Size

20·39 cows

RECEIPTS

For farms in this group, Sales of Milk and Milk Subsidy accounted for 82 percent of Total Farm Receipts. Of this total, Fluid Milk amounted to 70.5 percent while Manufactured Milk was 25.2 percent and Milk Subsidy 4.3 percent.

Livestock Sales accounted for 7.8 percent, Crop Sales 1.3 percent and Miscellaneous Sales 8.9 percent of Total Farm Receipts. Total Farm Receipts were $96,099 per farm or $2,884 on a per cow basis.

TABLE B-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$ 55,567	$ 1,668
Manufactured Milk Sales	19,895	597
Milk Subsidies	3,325	100
Livestock Sales	7,506	225
Crop Sales	1,281	38
Miscellaneous Sales	8,525	256
TOTAL FARM RECEIPTS	$ 96,099	$ 2,884

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EXPENSES

Total Cash Expenses for farms in this group were $78,699 per farm and $2,362 on a per cow basis.

The largest single expense item was purchased dairy feed amounting to $679 per cow or 28.7 percent of Cash Expenses. Feed was followed by Interest at 12.2 percent, Crop Expenses at 7.2 percent, Hired Labor at 6.8 percent, and Miscellaneous at 6.6 percent of Cash Expenses as major expense items.

TABLE B-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 2,955.	$ 89.
Dairy Feed	22,618.	679.
Livestock Purchased	2,502.	75.
Vet & Drugs	1,059.	32.
Breeding	1,002.	30.
Dairy Supplies	2,496.	75.
Milk Marketing	4,877.	146.
Crop Expenses	5,619.	169.
Building & Fence Repairs	2,273.	68.
Utilities	3,440.	103.
Tractor and Machinery Expense	4,851.	146.
Truck and Auto Expense	2,588.	78.
Interest	9,566.	287.
Hired Labor	5,338.	160.
Taxes	594.	18.
Insurance	1,748.	52.
Miscellaneous	5,175.	155.
TOTAL CASH EXPENSES	$78,699.	$2,362.

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INCOME SUMMARY

There are a number of measures of Income that are used in the Analysis of a farm business. Each measure has important uses and three of these measures are outlined below.

NET CASH INCOME is the difference between Farm Receipts and Cash Expenses. For this group of farms, Net Cash Income was $17,400 per farm or $522 on a per cow basis.

NET FARM INCOME further refines Net Cash Income by making two adjustments to this figure. The two adjustments are Inventory Change and Depreciation. The Net Farm Income - the return to the Operator for his labor, management and capital for this group was $8,104 per farm or $243 per cow.

LABOR AND MANAGEMENT INCOME further refines Net Farm Income by adjusting this figure for a return to Equity Capital. The result is a return to the Operator for his Labor and Management Skills. For farms in this group, Labor and Management Income was $2,656 per farm or $79 per cow.

TABLE B-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$96,099.	$2,884.
Total Cash Expenses	78,699.	2,362.
NET CASH INCOME	$17,400.	$ 522.
Plus: Inventory Change	2,129.	64.
Less: Depreciation	11,425.	343.
NET FARM INCOME	$ 8,104.	$ 243.
Less: Value of Unpaid Family Labor	421.	13.
Interest on Equity @ 10%	5,027.	151.
LABOR AND MANAGEMENT INCOME	$ 2,656.	$ 79.

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NET COST OF PRODUCTION

Farms in this group did not receive a return to all factors of production at the assumed levels. Total Cost of Producing milk averaged $49.90 per hectolitre while the return averaged $45.82.

Note that all costs have been charged - including a value for operator labor. If this charge was deducted, the return over costs would be $1.54 per hectolitre or $2,648 per farm and this amount would represent the return to the Operator for his Labor and Management Skills.

TABLE B-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$78,699.	$2,362.
Plus: Depreciation		11,425.	343.
Inventory Change		-(2,129.)	-(64.)
Interest on Equity @ 10%		5,027.	151.
Value of Unpaid Family Labor		421.	13.
Operator Labor		9,684.	291.
Less: Sales (Excl. Milk)		17,312.	520.
NET COST OF PRODUCING MILK		$85,815.	$2,575.
Number of Cows	(#)	33	1
Total Litres of Milk Sold	(L)	171,963	5,495
Price Received per HL	($)	45.82	45.82
Cost of Producing Milk per HL	($)	49.90	49.90
NET RETURN PER HL	($)	$ -(4.09)	$-(4.09)

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PRODUCTION ANALYSIS

For the 20 - 39 cow group, the average number of cows per farm was 33 with production of 5,495 litres per cow. The average price received per hectolitre for milk was $45.82.

Purchased dairy feed was the largest expense item accounting for 25.1 percent of total costs or 28.7 percent of milk sales. On a per cow basis, each cow equivalent consumed 2,424 kilograms of feed at a cost of $679. On a per farm basis, each farm purchased 79,992 kilograms of feed at a cost of $22,618.

TABLE B-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	33	1
Total Litres of Milk Sold	(L)	171,963	5,495
Value of Milk Sold	($)	$78,787	$2,364
Price Received per HL Milk	($)	45.82	45.82
Fluid Milk (L's as % of Total Milk)	(%)	67.4	67.4
Fluid Milk ($'s as % of Total Milk)	(%)	70.5	70.5
Cost of Dairy Feed	($)	22,618	679
Feed Cost per HL Milk Sold	($)	13.15	13.15
Feed Cost as % of Total Cost	(%)	25.1	25.1
Feed Cost as % of Milk Sales	(%)	28.7	28.7
Kilograms of Feed/HL Milk	(KGS)	47.0	47.0
Kilograms of Feed	(KGS)	79,992	2,424
Pounds of Feed	(LBS)	175,982	5,333

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BALANCE SHEET

The Balance Sheet provides a measure of the financial health of the business at a particular point in time. The Balance Sheet is composed of three (3) main parts, namely:

ASSETS are all items of value owned by the business.

LIABILITIES are debts owed by the business to others.

EQUITY OR NET WORTH is the difference between Assets and Liabilities and represents the owners contribution to the capital of the business.

For farms in this group, Total Assets averaged $167,806 or $5,036 on a per cow basis. Liabilities averaged $117,533 per farm or $3,527 on a per cow basis leaving Equity or Net Worth at $50,273 per farm or $1,509 on a per cow basis.

TABLE B-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 27,001.	$ 810.
" " - Buildings	44,259.	1,328.
" " - Machinery	30,793.	924.
" " - Livestock	38,179.	1,146.
" " - Crops & Supplies	6,941.	208.
" " - Milk Quota	9,918.	298.
" " - Acct's Receivable	10,716.	322.
TOTAL INVENTORY VALUE - ASSETS	$167,806.	$5,036.
LIABILITIES:		
Short Term	7,116.	214.
Intermediate Term	10,776.	323.
Long Term	99,642.	2,990.
TOTAL LIABILITIES	$117,533.	$3,527.
EQUITY OR NET WORTH	$ 50,273.	$1,509.

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BALANCE SHEET ANALYSIS

Farms in this cow group averaged 30.0 percent Equity on which they received no return to that Equity. Return to Total Capital Investment averaged 4.51 percent.

Capital Turnover was accomplished in 1.71 years.

Current ratio was $7.85 - for each dollar in current debt on these farms, there was $7.85 in current assets to cover these liabilities.

The ratio of Total Assets to Total Liabilities was 1.43 while Debt to Equity ratio averaged 2.34.

Net Farm Income as a percent of Gross Farm Income averaged 8.25 percent for these farms.

TABLE B-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	30.0
Return on Equity	(%)	Ø
Return on Invested Capital	(%)	4.51
Capital Turnover	(YRS)	1.71
Current Assets/Current Liabilities	($)	7.85
Total Assets/Total Liabilities	($)	1.43
Total Liabilities/Equity	($)	2.34
Net Income/Gross Income	(%)	8.25

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LABOR ANALYSIS

This size group of farms averaged 33 cows per farm or 21 cows per man equivalent. Interims of labor, there were 1.11 operator and unpaid family man equivalents per farm and .51 hired man equivalents.

Milk sold per man equivalent averaged 106,433 litres. Labor income per man equivalent (operator and unpaid family labor) averaged $2,779.00 for this group of farms.

TABLE B-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	33
Operator & Family Man Equivalents	(#)	1.11
Hired Man Equivalents	(#)	.51
Total Man Equivalents	(#)	1.62
Cows per Man Equivalents	(#)	21
Milk Sold per Man Equivalent	(L)	106,433
Milk Sold per Man Equivalent	($)	48,768
Labor Income per Man Equivalent Operator & Unpaid Family	($)	2,779

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ANALYSIS OF EXPENSES

For farms in this group, purchased dairy feed was the largest single expense item accounting for 25.1 percent of Total Costs. Feed was followed by Depreciation at 12.7 percent, Interest at 10.6 percent, Crop Expenses at 6.2 percent, Hired Labor at 5.9 percent and Miscellaneous at 5.7 percent.

TABLE B-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 89.	3.3 %
Dairy Feed	679.	25.1
Livestock Purchased	75.	2.8
Vet & Drugs	32.	1.2
Breeding	30.	1.1
Dairy Supplies	75.	2.8
Milk Marketing	146.	5.4
Crop Expenses	169.	6.2
Building and Fence Repairs	68.	2.5
Utilities	103.	3.8
Tractor & Machinery Expenses	146.	5.4
Truck & Auto Expenses	78.	2.9
Interest	287.	10.6
Hired Labor	160.	5.9
Taxes	18.	0.7
Insurance	52.	1.9
Miscellaneous	155.	5.7
Depreciation	343.	12.7
TOTAL EXPENSES	$2,704.	100.0%

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RECEIPTS AND EXPENSES SUMMARY

Figures presented in this table represents receipts and expenses for this size group of farms on a per cow, per hectolitre and a per hundredweight of milk sold basis.

TABLE B-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER HECTOLITRE	PER CWT
RECEIPTS:			
Fluid Milk Sales	$1,668.	$32.31.	$14.23.
Manufactured Milk Sales	597.	11.57.	5.10.
Milk Subsidy	100.	1.93.	0.85.
Livestock Sales	225.	4.37.	1.93.
Crop Sales	38.	0.74.	0.32.
Miscellaneous Sales	256.	4.96.	2.18.
TOTAL FARM RECEIPTS	$2,884.	$55.88.	$24.61.
Adj. for Inventory Change	64.	1.24.	0.55.
TOTAL FARM INCOME	$2,948.	$57.12.	$25.16.
EXPENSES:			
Milk Hauling	$ 89.	$ 1.72.	$ 0.76.
Dairy Feed	679.	13.15.	5.79.
Livestock Purchases	75.	1.45.	0.64.
Vet & Drugs	32.	0.62.	0.27.
Breeding	30.	0.58.	0.26.
Dairy Supplies	75.	1.45.	0.64.
Milk Marketing	146.	2.84.	1.25.
Crop Expenses	169.	3.27.	1.44.
Building & Fence Repairs	68.	1.32.	0.58.
Utilities	103.	2.00.	0.88.
Tractor & Machinery Expenses	146.	2.82.	1.24.
Truck & Auto Expenses	78.	1.50.	0.66.
Interest	287.	5.56.	2.45.
Hired Labor	160.	3.10.	1.37.
Taxes	18.	0.35.	0.15.
Insurance	52.	1.02.	0.45.
Miscellaneous	155.	3.01.	1.33.
TOTAL CASH EXPENSES	$2,362.	$45.76.	$20.16.
Depreciation	343.	6.64.	2.93.
TOTAL FARM EXPENSES	$2,704.	$52.41.	$23.09.
NET FARM INCOME	$ 243.	$ 4.71.	$ 2.07.

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Section C

Unit Size

40·59 cows

RECEIPTS

Farms in this size range had receipts from milk and milk subsidy of $119,642. or $2,404. on a per cow basis. This amount accounted for 83.1 percent of Total Farm Receipts. Of this amount, fluid milk represented 71.6 percent, manufactured milk 24.6 percent and milk subsidy 3.8 percent.

Livestock sales averaged 7.5 percent of Total Farm Receipts while Crop Sales were 1.5 percent and Miscellaneous Sales were 7.9 percent.

Total Farm Receipts averaged $143,959. per farm or $2,892. on a per cow basis.

TABLE C-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$ 85,680.	$ 1,721.
Manufactured Milk Sales	29,405.	591.
Milk Subsidy	4,557.	92.
Livestock Sales	10,733.	216.
Crop Sales	2,179.	44.
Miscellaneous Sales	11,405.	229.
TOTAL FARM RECEIPTS	$143,959.	$ 2,892.

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EXPENSES

Total Cash Expenses for farms in this group averaged $114,728. per farm or $2,305. per cow. Purchased dairy feed was the largest expense item and accounted for 29.4 percent of this total.

Feed was followed by Interest at 9.6 percent, Hired Labor at 9.3 percent, Miscellaneous at 7.8 percent and Crop Expenses at 7.2 percent.

TABLE C-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 4,320.	$ 87.
Dairy Feed	33,704.	677.
Livestock Purchased	4,088.	82.
Vet & Drugs	1,383.	28.
Breeding	1,716.	34.
Dairy Supplies	3,239.	65.
Milk Marketing	6,744.	135.
Crop Expenses	8,304.	167.
Building & Fence Repairs	3,118.	63.
Utilities	3,857.	77.
Tractor & Machinery Expense	7,121.	143.
Truck & Auto Expense	3,364.	68.
Interest	11,056.	222.
Hired Labor	10,682.	215.
Taxes	868.	17.
Insurance	2,254.	45.
Miscellaneous	8,911.	179.
TOTAL CASH EXPENSES	$114,728.	$ 2,305.

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INCOME SUMMARY

When analyzing a farm business, a number of different measures of income are often used to assess the financial strength of the business. Three (3) of these measures are:

NET CASH INCOME is the difference between Total Farm Receipts and Total Cash Expenses. For this group of farms, Net Cash Income was $29,231. per farm or $587. per cow.

NET FARM INCOME adjusts Net Cash Income for Inventory Change and Depreciation. Net Farm Income represents the return to the operator for his labor, management and capital. For this group, Net Farm Income was $17,783. per farm or $357. on a per cow basis.

LABOR AND MANAGEMENT INCOME represents the amount of Income left for the operator for his labor and management skills. For this group, Labor and Management Income was $8,511. per farm or $171. per cow.

TABLE C-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$143,959.	$ 2,892.
Total Cash Expenses	114,728.	2,305.
NET CASH INCOME	$ 29,231.	$ 587.
Plus: Inventory Change	$ 3,754.	$ 75.
Less: Depreciation	15,202.	305.
NET FARM INCOME	$ 17,783.	$ 357.
Less: Value of Unpaid Family Labor	$ 499.	$ 10.
Interest on Equity @ 10%	8,773.	176.
LABOR AND MANAGEMENT INCOME	$ 8,511.	$ 171.

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NET COST OF PRODUCTION

Farms in this group did not receive a return to all factors of production at the assumed levels from the sale of milk in 1983. On a farm basis, Net Cost of Producing Milk was $124,046.00. On a per hectolitre of milk sold basis, this cost was $46.67, leaving a Net Return of -$(1.66).

All costs, including a value for Operator Labor have been included. If Operator Labor was excluded, the cost would have been $41.81, leaving a Net Return of $3.21. This then would be the return to the operator for his labor.

TABLE C-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$114,728.	$ 2,305.
Plus: Depreciation		15,202.	305.
Inventory Change		-(3,754.)	-(75.)
Interest on Equity @ 10%		8,773.	176.
Value of Unpaid Family Labor		499.	10.
Operator Labor		12,915.	259.
Less: Sales (Excl. Milk)		24,317.	488.
NET COST OF PRODUCING MILK		$124,046.	$ 2,492.
Number of Cows	(#)	50	1
Total Litres of Milk Sold	(L)	265,780	5,339
Price Received per HL	($)	45.02	45.02
Cost of Producing Milk/HL	($)	46.67	46.67
NET RETURN PER HL	($)	-(1.66)	-(1.66)

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PRODUCTION ANALYSIS

Total milk sales averaged 265,780 litres per farm. For farms in this group, 50 cows per farm was the average with milk sold per cow standing at 5,339 litres.

Fluid milk represented 68.4 percent of the volume of milk sold while in dollar terms, fluid milk accounted for 71.6 percent of milk sales. Average blend price for all milk was $45.02 per hectolitre.

Purchased feed averaged $677. per cow or $12.68 per hectolitre of milk sold. These dollars represented 2,599 kilograms of feed per cow consumed.

TABLE C-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	50	1
Total Litres of Milk Sold	(L)	265,780	5,339
Value of Milk Sold	($)	119,642	2,404
Price Received per HL Milk	($)	45.02	45.02
Fluid Milk (L's as % of Total Milk)	(%)	68.4	67.0
Fluid Milk ($'s as % of Total Milk	(%)	71.6	72.1
Cost of Dairy Feed	($)	33,704	677
Feed Cost per HL Milk Sold	($)	12.68	12.68
Feed Cost as % of Total Cost	(%)	25.9	25.9
Feed Cost as % of Milk Sales	(%)	28.2	28.2
Kilograms of Feed/HL Milk	(KGS)	48.7	48.7
Kilograms of Feed	(KGS)	129,950	2,599
Pounds of Feed	(LBS)	285,890	5,717

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BALANCE SHEET

The Balance Sheet represents a picture of the financial position of a business at a particular point in time. The Balance Sheet is composed of three (3) main parts, namely:

ASSETS are items of value owned by the business.

LIABILITIES are debts owed by the business to others.

EQUITY OR NET WORTH is the difference between Assets and Liabilities and represents the owners capital investment in the business.

For this group of farms, Assets amounted to $230,377. per farm or $4,628. per cow. Liabilities averaged $142,645. per farm and $2,865. on a per cow basis. Equity or Net Worth - the difference between Assets and Liabilities was $87,731. per farm or $1,762. per cow.

TABLE C-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 38,247.	$ 768.
" " - Buildings	48,681.	978.
" " - Machinery	42,027.	844.
" " - Livestock	64,610.	1,298.
" " - Crops & Supplies	10,318.	207.
" " - Milk Quota	13,257.	266.
" " - Acct's Receivable	12,902.	259.
TOTAL INVENTORY VALUE - ASSETS	$230,377.	$ 4,628.
LIABILITIES:		
Short Term	$ 11,284.	$ 227.
Intermediate Term	22,595.	454.
Long Term	108,766.	2,185.
TOTAL LIABILITIES	$142,645.	$ 2,865.
EQUITY OR NET WORTH	$ 87,731.	$ 1,762.

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BALANCE SHEET ANALYSIS

For farms in this size group, Equity in the farm business averaged 38.1 percent. Farms received a return to equity capital of 4.98 percent and a return to total capital of 6.71 percent.

Capital Turnover averaged 1.56 years.

Total Assets to Total Liabilities ratio was $1.62 - for every dollar of debt there were $1.62 of assets.

Net Income as a percent of Gross Farm Income averaged 12.04 percent for this group of farms.

TABLE C-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	38.1
Return on Equity	(%)	4.98
Return on Invested Capital	(%)	6.71
Capital Turnover	(YRS)	1.56
Current Assets/Current Liabilities	($)	7.81
Total Assets/Total Liabilities	($)	1.62
Total Liabilities/Equity	($)	1.63
Net Income/Gross Income	(%)	12.04

.../23

LABOR ANALYSIS

The labor complement on farms in this size range averaged 2.23 man equivalents, composed of 1.23 operator and unpaid family labor and 1 hired man equivalent.

For each man equivalent, 22 cows were maintained with 118,415 litres of milk sold at a value of $53,310.00.

Labor Income per man equivalent averaged $7,342.00.

TABLE C-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	50
Operator & Family Man Equivalents	(#)	1.23
Hired Man Equivalents	(#)	1.00
Total Man Equivalents	(#)	2.23
Cows per Man Equivalent	(#)	22
Milk Sold per Man Equivalent	(L)	118,415
Milk Sold per Man Equivalent	($)	53,310
Labor Income Per Man Equivalent Operator & Unpaid Family	($)	7,342

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ANALYSIS OF EXPENSES

Purchased Dairy Feed was the largest expense item and accounted for 25.9 percent of Total Expenses. Feed was followed by Depreciation at 11.7 percent, Interest at 8.5 percent, Hired Labor at 8.2 percent, Miscellaneous at 6.9 percent and Crop Expenses at 6.4 percent of Total Expenses.

TABLE C-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 87.	3.3 %
Dairy Feed	677.	25.9
Livestock Purchased	82.	3.2
Vet & Drugs	28.	1.1
Breeding	34.	1.3
Dairy Supplies	65.	2.5
Milk Marketing	135.	5.2
Crop Expenses	167.	6.4
Building and Fence Repairs	63.	2.4
Utilities	77.	3.0
Tractor and Machinery Expenses	143.	5.5
Truck and Auto Expenses	68.	2.6
Interest	222.	8.5
Hired Labor	215.	8.2
Taxes	17.	0.7
Insurance	45.	1.7
Miscellaneous	179.	6.9
Depreciation	305.	11.7
TOTAL EXPENSES	$ 2,610.	100.0 %

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RECEIPTS AND EXPENSES SUMMARY

Information supplied in this section summarizes receipts and expenses for this group of farms on a per cow, per hectolitre and a per hundredweight milk sold basis.

TABLE C-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER HECTOLITRE	PER CWT
RECEIPTS:			
Fluid Milk Sales	$ 1,721.	$ 32.24	$ 14.20
Manufactured Milk Sales	591.	11.06	4.87
Milk Subsidy	92.	1.71	0.75
Livestock Sales	216.	4.04	1.78
Crop Sales	44.	0.82	0.36
Miscellaneous Sales	229.	4.29	1.89
TOTAL FARM RECEIPTS	$ 2,892.	$ 54.16	$ 23.86
Adj. for Inventory Change	$ 75.	$ 1.41	$ 0.62
TOTAL FARM INCOME	$ 2,967.	$ 55.58	$ 24.48
EXPENSES:			
Milk Hauling	$ 87.	$ 1.63	$ 0.72
Dairy Feed	677.	12.68	5.59
Livestock Purchases	82.	1.54	0.68
Vet & Drugs	28.	0.52	0.23
Breeding	34.	0.65	0.29
Dairy Supplies	65.	1.22	0.54
Milk Marketing	135.	2.54	1.12
Crop Expenses	167.	3.12	1.37
Building & Fence Repairs	63.	1.17	0.52
Utilities	77.	1.45	0.64
Tractor & Machinery Expenses	143.	2.68	1.18
Truck & Auto Expenses	68.	1.27	0.56
Interest	222.	4.16	1.83
Hired Labor	215.	4.02	1.77
Taxes	17.	0.33	0.15
Insurance	45.	0.85	0.37
Miscellaneous	179.	3.35	1.48
TOTAL CASH EXPENSES	$ 2,305.	$ 43.17	$ 19.02
Depreciation	$ 305.	$ 5.72	$ 2.52
TOTAL FARM EXPENSES	$ 2,610.	$ 48.89	$ 21.54
NET FARM INCOME	$ 367.	$ 6.69	$ 2.95

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Section D

Unit Size

60·99 cows

RECEIPTS

Receipts from the sale of milk and milk subsidy accounted for 84.9 percent of Total Farm Receipts. Of this amount, Fluid Milk averaged 73.7 percent, Manufactured Milk 22.7 percent and Milk Subsidy 3.6 percent.

Livestock Sales accounted for 7.3 percent, Crop Sales 1.8 percent and Miscellaneous Sales 6.0 percent of Total Farm Receipts.

Total FArm Receipts averaged $219,093. per farm, and $2,974. on a per cow basis.

TABLE D-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$137,110.	$ 1,861.
Manufactured Milk Sales	42,228.	573.
Milk Subsidy	6,741.	92.
Livestock Sales	15,930.	216.
Crop Sales	3,840.	52.
Miscellaneous Sales	13,243.	180.
TOTAL FARM RECEIPTS	$219,093.	$ 2,974.

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EXPENSES

Purchased Diary Feed was the largest single expense item. Purchased Feed amounted to $49,405. per farm or $671. per cow. This amount was 27.8 percent of the Total Cash Expenses of $178,098. per farm or $2,417. per cow.

Feed was followed by Interest at 11.1 percent, Hired Labor at 10.6 percent, Miscellaneous at 8.2 percent and Crop Expenses at 7.8 percent of Total Cash Expenses.

TABLE D-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 6,824.	$ 93.
Dairy Feed	49,405.	671.
Livestock Purchased	4,984.	68.
Vet & Drugs	2,430.	33.
Breeding	2,186.	30.
Dairy Supplies	4,124.	56.
Milk Marketing	9,736	132.
Crop Expenses	13,854.	188.
Building and Fence Repairs	4,600.	62.
Utilities	5,069.	69.
Tractor and Machinery Expense	13,013.	177.
Truck and Auto Expense	3,969.	54.
Interest	19,831.	269.
Hired Labor	18,858.	256.
Taxes	1,364.	19.
Insurance	3,316.	45.
Miscellaneous	14,534.	197.
TOTAL CASH EXPENSES	$178,098.	$ 2,417.

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INCOME SUMMARY

The analysis of income is one of the important aspects of Farm Business Analysis. There are a number of different measures of Income that are often used for Income Analysis.

NET CASH INCOME is the difference between Farm Receipts and Cash Expenses. For this group of farms, Net Cash Income was $40,995. per farm or $557. per cow.

NET FARM INCOME adjusts Net Cash Income for Inventory Change and Depreciation. Net Farm Income represents the return to the operator for his labor, management and capital. The average Net Farm Income for these farms was $23,575. per farm or $310. on a per cow basis.

LABOR AND MANAGEMENT INCOME further refines income by deducting a value for Unpaid Family Labor and Interest on Equity and represents the return to the operator for his labor and management skills. For the group, Labor and Management Income was $10,691. per farm.

TABLE D-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$219,093.	$ 2,974.
Total Cash Expenses	178,098.	2,417.
NET CASH INCOME	$ 40,995.	$ 557.
Plus: Inventory Change	$ 5,424.	$ 74.
Less: Depreciation	22,844.	310.
NET FARM INCOME	$ 23,575.	$ 321.
Less: Value of Unpaid Family Labor	$ 628.	$ 9.
Interest on Equity @ 10%	12,256.	166.
LABOR AND MANAGEMENT INCOME	$ 10,691.	$ 146.

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NET COST OF PRODUCTION

The Net Cost of Producing Milk for this group of farms was $191,419. per farm or $2,598. per cow. On a per hectolitre of milk sold basis. this cost was $46.57. The return from the sale of milk averaged $45.27 leaving a negative return over costs of $1.30 per hectolitre.

Note that all costs including a value for Operator Labor has been included in this calculation. If Operator Labor was excluded, the Net Cost would have been $42.67, leaving a Net Return of $2.60. This then would be the return to Operator Labor.

TABLE D-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$178,098.	$ 2,417.
Plus: Depreciation		22,844.	310.
Inventory Change		-(5,424.)	-(74.)
Interest on Equity @ 10%		12,256.	166.
Value of Unpaid Family Labor		628.	9.
Operator Labor		16,030.	218.
Less: Sales (Excl. Milk)		33,013.	448.
NET COST OF PRODUCING MILK		$191,419.	$ 2,598.
Number of Cows	(#)	74	1
Total Litres of Milk Sold	(L)	411,028	5,579
Price Received per HL	($)	45.27	45.27
Cost of Producing Milk per HL	($)	46.57	46.57
NET RETURN PER HL	($)	-(1.30)	-(1.30)

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PRODUCTION ANALYSIS

This group of farms averaged 74 cows per farm, with production of 411,028 litres of milk sold or 5,579 litres per cow. Feed Cost, the largest single expense item averaged $49,405. per farm, $671. per cow or $12.02 per hectolitre of milk sold. In percentage terms, feed cost averaged 24.6 percent of Total Costs or 26.6 percent of Milk Sales. Each cow consumed a total of 2,485 kilograms of feed.

TABLE D-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	74	1
Total Litres of Milk Sold	(L)	411,028	5,579
Value of Milk Sold	($)	186,080	2,526
Price Received per HL Milk	($)	45.27	45.27
Fluid Milk (L's as % of Total Milk)	(%)	74.6	74.6
Fluid Milk ($'s as % of Total Milk)	(%)	77.6	77.6
Cost of Dairy Feed	($)	49,405	671
Feed Cost per HL Milk Sold	($)	12.02	12.02
Feed Cost as % of Total Cost	(%)	24.6	24.6
Feed Cost as % of Milk Sales	(%)	26.6	26.6
Kilograms of Feed/HL Milk	(KGS)	44.5	44.5
Kilograms of Feed	(KGS)	183,890	2,485
Pounds of Feed	(LBS)	404,558	5,467

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BALANCE SHEET

The Balance Sheet provides a picture of the financial structure of a business at a particular point in time. There are three (3) main parts to a Balance Sheet, namely;

ASSETS which are items of value owned by the business.

LIABILITIES which are debts owed by the business to others.

EQUITY OR NET WORTH which is the difference between Assets and Liabilities.

For farms in this size range, Inventory Value of Assets averaged $345,735. with Liabilities of $223,172. Equity averaged $122,563. per farm or $1,664. on a per cow basis.

TABLE D-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 48,670.	$ 661.
" " - Buildings	76,854.	1,043.
" " - Machinery	58,307.	791.
" " - Livestock	93,974.	1,276.
" " - Crops & Supplies	16,715.	227.
" " - Milk Quota	24,441.	332.
" " - Acct's Receivable	25,729.	349.
TOTAL INVENTORY VALUE - ASSETS	$345,735.	$ 4,693.
LIABILITIES:		
Short Term	$ 22,088.	$ 300.
Intermediate Term	36,755.	499.
Long Term	164,329.	2,230.
TOTAL LIABILITIES	$223,172.	$ 3,029.
EQUITY OR NET WORTH	$122,563.	$ 1,664.

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BALANCE SHEET ANALYSIS

Equity in farms of this size range averaged 35.5 percent. Farmers received a return to Equity of 5.64 percent, while a 7.76 percent return to Total Investment was achieved.

Capital Turnover was achieved in 1.54 years.

Debt to Equity ratio averaged $1.82.

Net Farm Income as a percent of Total Farm Income averaged 10.5 percent for this group of farms.

TABLE D-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	35.5
Return on Equity	(%)	5.64
Return on Invested Capital	(%)	7.76
Capital Turnover	(YRS)	1.54
Current Assets/Current Liabilities	($)	6.22
Total Assets/Total Liabilities	($)	1.55
Total Liabilities/Equity	($)	1.82
Net Income/Gross Income	(%)	10.50

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LABOR ANALYSIS

The labor requirement for farms in this size group is estimated to be 3.12 man equivalents made up of 1.32 operator and family man equivalents and 1.8 hired man equivalents. For each man equivalent, 24 cows were maintained with production of 131,725 litres of milk.

Labor Income per Man equivalent averaged $8,546. for farms in this size range.

TABLE D-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	74
Operator & Family Man Equivalents	(#)	1.32
Hired Man Equivalents	(#)	1.80
Total Man Equivalents	(#)	3.12
Cows per Man Equivalent	(#)	24
Milk Sold per Man Equivalent	(L)	131,725
Milk Sold per Man Equivalent	($)	59,632
Labor Income per Man Equivalent Operator & Unpaid Family	($)	8,546

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ANALYSIS OF EXPENSES

Purchased Dairy Feed accounted for 24.6 percent of Total Farm Expenses. Feed was followed by Depreciation at 11.3 percent, Interest at 9.9 percent, Hired Labor at 9.4 percent, Miscellaneous at 7.2 percent and Crop Expenses at 6.9 percent of Total Expenses.

TABLE D-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 93.	3.4 %
Dairy Feed	671.	24.6
Livestock Purchased	68.	2.5
Vet & Drugs	33.	1.2
Breeding	30.	1.1
Dairy Supplies	56.	2.0
Milk Marketing	132.	4.9
Crop Expenses	188.	6.9
Building and Fence Repairs	62.	2.3
Utilities	69.	2.5
Tractor and Machinery Expenses	177.	6.5
Truck and Auto Expenses	54.	2.0
Interest	269.	9.9
Hired Labor	256.	9.4
Taxes	19.	0.7
Insurance	45.	1.6
Miscellaneous	197.	7.2
Depreciation	310.	11.3
TOTAL EXPENSES	$ 2,727.	100.0 %

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RECEIPTS AND EXPENSES SUMMARY

For this group of farms, information in the table below is presented on a per cow, per hectolitre and a per hundredweight of milk sold basis.

TABLE D-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER HECTOLITRE	PER CWT
RECEIPTS:			
Fluid Milk Sales	$1,861.	$ 33.36	$ 14.70
Manufactured Milk Sales	573.	10.27	4.52
Milk Subsidy	92.	1.64	0.72
Livestock Sales	216.	3.88	1.71
Crop Sales	52.	0.93	0.41
Miscellaneous Sales	180.	3.22	1.42
TOTAL FARM RECEIPTS	$2,974.	$ 53.30	$ 23.48
Adj. for Inventory Change	$ 74.	$ 1.32	$ 0.58
TOTAL FARM INCOME	$3,047.	$ 54.62	$ 24.06
EXPENSES:			
Milk Hauling	$ 93.	$ 1.66	$ 0.73
Dairy Feed	671.	12.02	5.30
Livestock Purchases	68.	1.21	0.53
Vet & Drugs	33.	0.59	0.26
Breeding	30.	0.53	0.23
Dairy Supplies	56.	1.00	0.44
Milk Marketing	132.	2.37	1.04
Crop Expenses	188.	3.37	1.48
Building & Fence Repairs	62.	1.12	0.49
Utilities	69.	1.23	0.54
Tractor & Machinery Expenses	177.	3.17	1.40
Truck & Auto Expenses	54.	0.97	0.43
Interest	269.	4.82	2.12
Hired Labor	256.	4.59	2.02
Taxes	19.	0.33	0.15
Insurance	45.	0.81	0.36
Miscellaneous	197.	3.54	1.56
TOTAL CASH EXPENSES	$2,417.	$ 43.33	$ 19.09
Depreciation	$ 310.	$ 5.56	$ 2.45
TOTAL FARM EXPENSES	$2,727.	$ 48.89	$ 21.54
NET FARM INCOME	$ 320.	$ 5.74	$ 2.53

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Section E

Unit Size

100+ cows

RECEIPTS

Farms in this size range had average Farm Receipts of $404,486. per farm and $2,957. on a per cow basis.

These farms are highly specialized dairy units with Income from Milk Sales and Milk Subsidy accounting for 83.8 percent of Total Farm Receipts. Of this amount, Fluid Sales accounted for 65.5 percent, Manufactured Milk 29.6 percent and Milk Subsidy 4.9 percent of Milk Receipts.

Livestock Sales amounted to 7.5 percent, Crop Sales 1.9 percent and Miscellaneous Sales 6.8 percent of Total Farm Receipts.

TABLE E-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$222,004.	$ 1,623.
Manufactured Milk Sales	100,249.	733.
Milk Subsidy	16,802.	123.
Livestock Sales	30,132.	220.
Crop Sales	7,675.	56.
Miscellaneous Sales	27,624.	202.
TOTAL FARM RECEIPTS	$404,486.	$ 2,957.

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EXPENSES

Total Cash Expenses averaged $334,426. per farm or $2,445. per cow for farms in this size group.

Purchased Dairy Feed was the largest single expense item and accounted for $712. per cow or 29.1 percent of Total Cash Expenses. Feed was followed by Miscellaneous at 12.4 percent, Hired Labor at 9.8 percent, Crop Expenses at 7.8 percent and Tractor & Machinery Expense at 7.2 percent of Total Cash Expenses.

TABLE E-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 12,260.	$ 90.
Dairy Feed	97,345.	712.
Livestock Purchased	12,276.	90.
Vet & Drugs	4,263.	31.
Breeding	4,219.	31.
Dairy Supplies	8,278.	61.
Milk Marketing	20,428.	149.
Crop Expenses	25,955.	190.
Building and Fence Repairs	8,414.	62.
Utilities	8,216.	60.
Tractor and Machinery Expense	24,274.	177.
Truck and Auto Expense	5,438.	40.
Interest	23,048.	169.
Hired Labor	32,853.	240.
Taxes	1,999.	15.
Insurance	3,678.	27.
Miscellaneous	41,482.	303.
TOTAL CASH EXPENSES	$334,426.	$ 2,445.

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INCOME SUMMARY

Different measures of income are often used when analysing a farm business to provide information about that business. In this section, we calculate three (3) different income levels, namely;

NET CASH INCOME which is the difference between Total Farm Receipts and Total Cash Expenses. For these farms, Net Cash Income was $70,060. per farm or $512. per cow.

NET FARM INCOME further adjusts Net Cash Income for Inventory Change and Depreciation and represents the return to the operator for his labor, management and capital. For these farms, Net Farm Income was $49,077. or $359. per cow.

LABOR AND MANAGEMENT INCOME represents the return to the operator for his labor and management skills. It is found by adjusting Net Farm Income for Unpaid Family Labor and Return to Equity Capital. For these farms, Labor and Management Income was $24,677. per farm or $180. per cow.

TABLE E-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$404,486.	$2,957.
Total Cash Expenses	334,426.	2,445.
NET CASH INCOME	$ 70,060.	$ 512.
Plus: Inventory Change	$ 19,789.	$ 145.
Less: Depreciation	40,772.	298.
NET FARM INCOME	$ 49,077.	$ 359.
Less: Value of Unpaid Family Labor	$ 1,039.	$ 8.
Interest on Equity @ 10%	23,361.	171.
LABOR AND MANAGEMENT INCOME	$ 24,677.	$ 180.

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NET COST OF PRODUCTION

The Net Cost of Producing Milk for this group of farms averaged $45.17 per hectolitre. Revenue from the sale of milk and milk subsidy averaged $45.01, leaving a Net Return of -$(0.16) per hectolitre.

It should be noted that all costs have been included in the above calculation, including a value for Operator Labor. If Operator Labor was excluded, the Net Cost would be $41.73, leaving a Net Return of $3.28 - this then would be the Return to the Operator for his Labor and Management.

TABLE E-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$334,426.	$2,445.
Plus: Depreciation		40,772.	298.
Inventory Change		-(19,789.)	-(145.)
Interest on Equity @ 10%		23,361.	171.
Value of Unpaid Family Labor		1,039.	8.
Operator Labor		25,909.	189.
Less: Sales (Excl. Milk)		65,431.	478.
NET COST OF PRODUCING MILK		$340,286.	$2,488.
Number of Cows	(#)	137	1
Total Litres of Milk Sold	(L)	753,302	5,508
Price Received per HL	($)	45.01	45.01
Cost of Producing Milk per HL	($)	45.17	45.17
NET RETURN PER HL	($)	-(0.16)	-(0.16)

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PRODUCTION ANALYSIS

For this group, the average number of cows maintained per farm was 137, with production per cow of 5,508 litres of milk valued at $2,475. per cow.

Purchased Dairy Feed accounted for $712. per cow or 25.9 percent of Total Farm Expenses. Feed cost per hectolitre averaged $12.92 for these farms.

Each cow maintained consumed 2,715 kilograms of feed to produce 5,508 litres of milk. Hence, feed consumed per hectolitre was 49.29 kilograms

TABLE E-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	137	1
Total Litres of Milk Sold	(L)	753,302	5,508
Value of Milk Sold	($)	339,061	2,475
Price Received per HL Milk	($)	45.01	45.01
Fluid Milk (L's as % of Total Milk)	(%)	61.8	61.8
Fluid Milk ($'s as % of Total Milk)	(%)	65.5	65.5
Cost of Dairy Feed	($)	97,345	712
Feed Cost per HL Milk Sold	($)	12.92	12.92
Feed Cost as % of Total Cost	(%)	25.9	25.9
Feed Cost as % of Milk Sales	(%)	28.7	28.7
Kilograms of Feed/HL Milk	(KGS)	49.29	49.29
Kilograms of Feed	(KGS)	371,955	2,715
Pounds of Feed	(LBS)	818,301	5,973

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BALANCE SHEET

The Balance Sheet is one of the basic financial statements of any business. The Balance Sheet provides a picture of the financial strength of a business at a particular point in time.

ASSETS are items of value owned by the business.

LIABILITIES are debts owed by the business to others.

EQUITY OR NET WORTH is the difference between Assets and Liabilities and represents the owners contribution to the total capital of the business.

Farms in this size range had Assets valued at $509,696. per farm or $3,727. per cow, while Liabilities averaged $276,087. per farm or $2,019. per cow. Equity averaged $233,609. per farm or $1,708. on a per cow basis.

TABLE E-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 57,605.	$ 421.
" " - Buildings	95,744.	700.
" " - Machinery	111,050.	812.
" " - Livestock	162,307.	1,187.
" " - Crops & Supplies	32,479.	237.
" " - Milk Quota	17,755.	130.
" " - Acct's Receivable	31,358.	229.
TOTAL INVENTORY VALUE - ASSETS	$509,696.	$3,727.
LIABILITIES:		
Short Term	$ 29,144.	$ 213.
Intermediate Term	65,342.	478.
Long Term	181,600.	1,328.
TOTAL LIABILITIES	$276,087.	$2,019.
EQUITY OR NET WORTH	$233,609.	$1,708.

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BALANCE SHEET ANALYSIS

Equity in farms in this group averaged 45.8 percent, with a return to equity achieved of 9.5 percent. Return to Total Capital was 8.9 percent.

Capital Turnover was achieved in 1.2 years.

Current ratio averaged 7.81, while Total Assets to Total Liabilities averaged 1.85.

Net Income as a percent of Gross Farm Income was 11.57 percent for these farms.

TABLE E-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	45.8
Return on Equity	(%)	9.5
Return on Invested Capital	(%)	8.9
Capital Turnover	(YRS)	1.2
Current Assets/Current Liabilities	($)	7.81
Total Assets/Total Liabilities	($)	1.85
Total Liabilities/Equity	($)	1.18
Net Income/Gross Income	(%)	11.57

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LABOR ANALYSIS

The labor requirement for farms in this group was estimated to be five (5) man equivalents of which 1.88 were Operator and Unpaid Family and 3.13 were Hired Man Equivalents.

For each man equivalent, 27 cows were maintained with production of 150,755 litres of milk valued at $67,630.00.

Labor Income per man equivalent was $13,646.00.

TABLE E-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	137
Operator & Family Man Equivalents	(#)	1.88
Hired Man Equivalents	(#)	3.13
Total Man Equivalents	(#)	5.01
Cows per Man Equivalent	(#)	27
Milk Sold per Man Equivalent	(L)	150,255
Milk Sold per Man Equivalent	($)	67,630
Labor Income per Man Equivalent Operator & Unpaid Family	($)	13,646

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ANALYSIS OF EXPENSES

In analyzing the various expenses for this group of farms, Purchased Dairy Feed accounted for 25.9 percent of Total Farm Expenses. Other major expense items included: Miscellaneous at 11.1 percent, Depreciation at 10.9 percent, Hired Labor at 8.8 percent, and Crop Expenses at 6.9 percent of Total Farm Expenses.

TABLE E-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 90.	3.3 %
Dairy Feed	712.	25.9
Livestock Purchased	90.	3.3
Vet & Drugs	31.	1.1
Breeding	31.	1.1
Dairy Supplies	61.	2.2
Milk Marketing	149.	5.4
Crop Expenses	190.	6.9
Building and Fence Repairs	62.	2.2
Utilities	60.	2.2
Tractor and Machinery Expenses	177.	6.5
Truck and Auto Expenses	40.	1.5
Interest	169.	6.1
Hired Labor	240.	8.8
Taxes	15.	0.5
Insurance	27.	1.0
Miscellaneous	303.	11.1
Depreciation	298.	10.9
TOTAL EXPENSES	$ 2,743.	100.0 %

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RECEIPTS AND EXPENSES SUMMARY

Information presented in this section is on a per cow, per hectolitre and a per hundredweight milk sold basis.

TABLE E-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER HECTOLITRE	PER CWT
RECEIPTS:			
Fluid Milk Sales	$1,623.	$ 29.47	$12.98
Manufactured Milk Sales	733.	13.31	5.86
Milk Subsidy	123.	2.23	0.98
Livestock Sales	220.	4.00	1.76
Crop Sales	56.	1.02	0.45
Miscellaneous Sales	202.	3.67	1.62
TOTAL FARM RECEIPTS	$2,957.	$ 53.70	$23.65
Adj. for Inventory Change	$ 145.	$ 2.63	$ 1.16
TOTAL FARM INCOME	$3,102.	$ 56.32	$24.81
EXPENSES:			
Milk Hauling	$ 90.	$ 1.63	$ 0.72
Dairy Feed	712.	12.92	5.69
Livestock Purchases	90.	1.63	0.72
Vet & Drugs	31.	0.57	0.25
Breeding	31.	0.56	0.25
Dairy Supplies	61.	1.10	0.48
Milk Marketing	149.	2.71	1.19
Crop Expenses	190.	3.45	1.52
Building & Fence Repairs	62.	1.12	0.49
Utilities	60.	1.09	0.48
Tractor & Machinery Expenses	177.	3.22	1.42
Truck & Auto Expenses	40.	0.72	0.32
Interest	169.	3.06	1.35
Hired Labor	240.	4.36	1.92
Taxes	15.	0.27	0.12
Insurance	27.	0.49	0.22
Miscellaneous	303.	5.51	2.43
TOTAL CASH EXPENSES	$2,445.	$ 44.39	$19.56
Depreciation	$ 298.	$ 5.41	$ 2.38
TOTAL FARM EXPENSES	$2,743.	$ 49.81	$21.94
NET FARM INCOME	$ 359.	$ 6.51	$ 2.87

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Section F

Analysis of

All Farms

RECEIPTS

Total Farm Receipts for all farms in the study averaged $178,879. per farm or $2,934. on a per cow basis. These farms are highly specialized dairy farms with 83.7 percent of Farm Receipts in the form of Milk Sales and Milk Subsidy.

Livestock Sales accounted for another 7.4 percent, while Crop Sales and Miscellaneous Sales amounted to 1.7 and 7.2 percent respectfully.

TABLE F-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$106,075.	$1,740.
Manufactured Milk Sales	37,652.	617.
Milk Subsidy	6,081.	100.
Livestock Sales	13,308.	218.
Crop Sales	2,966.	49.
Miscellaneous Sales	12,797.	210.
TOTAL FARM RECEIPTS	$178,879.	$2,934.

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EXPENSES

When all farms in the study are combined, average Cash Expenses were $145,311. per farm or $2,383. on a per cow basis. Purchased Dairy Feed was the largest expense item at $683. per cow or 28.7 percent of Cash Expenses. Other major expense items included Interest at 9.9 percent, Hired Labor at 9.5 percent, Miscellaneous at 8.8 percent and Crop Expenses at 7.6 percent of Total Cash Expenses.

TABLE F-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 5,470.	$ 90.
Dairy Feed	41,637.	683.
Livestock Purchased	4,747.	78.
Vet & Drugs	1,884.	31.
Breeding	1,913.	31.
Dairy Supplies	3,801.	62.
Milk Marketing	8,476.	139.
Crop Expenses	10,946.	180.
Building & Fence Repairs	3,849.	63.
Utilities	4,529.	74.
Tractor and Machinery Expense	9,919.	163.
Truck and Auto Expense	3,541.	58.
Interest	14,363.	236.
Hired Labor	13,828.	227.
Taxes	1,051.	17.
Insurance	2,566.	42.
Miscellaneous	12,791.	210.
TOTAL CASH EXPENSES	$145,311.	$2,383.

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INCOME SUMMARY

An analysis of income is an important part of any farm business analysis exercise. There are a number of different measures of income that are often used for this purpose. These include:

NET CASH INCOME which is the difference between Farm Receipts and Cash Expenses. For the total group, Net Cash Income averaged $33,568. per farm or $551. per cow.

NET FARM INCOME which represents the return to the Operator for his labor and management and for his capital investment in the business. Net Farm Income averaged $20,029. per farm or $329. on a per cow basis for all farms in the summary.

LABOR AND MANAGEMENT INCOME which indicates the return to Operator Labor and Management when all other costs are deducted. For all farms, this amount averaged $9,216. per farm or $152. per cow.

TABLE F-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$178,879.	$2,934.
Total Cash Expenses	145,311.	2,383.
NET CASH INCOME	$ 33,568.	$ 551.
Plus: Inventory Change	$ 5,407.	$ 89.
Less: Depreciation	18,946.	311.
NET FARM INCOME	$ 20,029.	$ 329.
Less: Value of Unpaid Family Labor	$ 569.	$ 9.
Interest on Equity @ 10%	10,244.	168.
LABOR AND MANAGEMENT INCOME	$ 9,216.	$ 152.

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NET COST OF PRODUCTION

The Net Cost of Producing Milk averaged $2,535. per cow or $46.65 per hectolitre. Returns from the sale of milk were $45.21, leaving a net return of -$(1.44) per hectolitre.

Note that all costs have been included in this calculation. If operator labor was excluded, the net cost would have been $42.44, providing a net return of $2.77. This amount would represent the return to operator labor.

TABLE F-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$145,311.	$2,383.
Plus: Depreciation		18,946.	311.
Inventory Change		-(5,407.)	-(89.)
Interest on Equity @ 10%		10,244.	168.
Value of Unpaid Family Labor		569.	9.
Operator Labor		13,963.	229.
Less: Sales (Excl. Milk)		29,071.	477.
NET COST OF PRODUCING MILK		$154,554.	$2,535.
Number of Cows	(#)	61	1
Total Litres of Milk Sold	(L)	331,335	5,434
Price Received per HL	($)	45.21	45.21
Cost of Producing Milk per HL	($)	46.65	46.65
NET RETURN PER HL	($)	-(1.44)	-(1.44)

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PRODUCTION ANALYSIS

For all farms in the summary, the average herd size was 61 cows, each producing 5,434 litres of milk for sale. Price received per hectolitre was $45.21.

Purchased Feed accounted for 25.3 percent of Total Farm Expenses. On a per hectolitre basis, feed cost was $12.57. For each cow maintained, 2,561 kilograms of feed were required.

TABLE F-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	61	1
Total Litres of Milk Sold	(L)	331,335	5,434
Value of Milk Sold	($)	149,807	2,457
Price Received per HL Milk	($)	45.21	45.21
Fluid Milk (L's as % of Total Milk)	(%)	67.5	67.5
Fluid Milk ($'s as % of Total Milk)	(%)	70.8	70.8
Cost of Dairy Feed	($)	41,637	683
Feed Cost per HL Milk Sold	($)	12.57	12.57
Feed Cost as % of Total Cost	(%)	25.3	25.3
Feed Cost as % of Milk Sales	(%)	27.8	27.8
Kilograms of Feed/HL Milk	(KGS)	47.13	47.13
Kilograms of Feed	(KGS)	156,221	2,561
Pounds of Feed	(LBS)	343,686	5,634

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BALANCE SHEET

The Balance Sheet is one of the fundamental tools of a farm business. The Balance Sheet provides information about the financial structure and health of the business at a specific point in time. There are three (3) main parts to a Balance Sheet.

ASSETS are items of value owned by the business.

LIABILITIES are debts owed by the business to others.

EQUITY OR NET WORTH is the difference between Assets and Liabilities and represents the owners capital contribution to the business.

For the total group, Assets were $274,777, while Liabilities averaged $172,341.00 Equity averaged $102,436. per farm or $1,680. on a per cow basis.

TABLE F-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 40,208.	$ 659.
" " - Buildings	60,249.	988.
" " - Machinery	50,625.	830.
" " - Livestock	75,824.	1,243.
" " - Crops & Supplies	13,471.	221.
" " - Milk Quota	16,017.	263.
" " - Acct's Receivable	17,827.	292.
TOTAL INVENTORY VALUE - ASSETS	$274,777.	$4,506.
LIABILITIES:		
Short Term	$ 15,055.	$ 247.
Intermediate Term	27,809.	456.
Long Term	129,477.	2,123.
TOTAL LIABILITIES	$172,341.	$2,826.
EQUITY OR NET WORTH	$102,436.	$1,680.

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BALANCE SHEET ANALYSIS

When all farms were combined, average equity in the farm business was 37.3 percent. Farms received a 5.37 percent return to Equity Capital and a 7.24 percent return to Total Capital Investment.

Capital Turnover was achieved in 1.49 years.

Total Assets to Total Liabilities Ratio averaged $1.59.

Net Farm Income as a percent of Total Farm Income averaged 10.87 percent.

TABLE F-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	37.3
Return on Equity	(%)	5.37
Return on Invested Capital	(%)	7.24
Capital Turnover	(YRS)	1.49
Current Assets/Current Liabilities	($)	7.15
Total Assets/Total Liabilities	($)	1.59
Total Liabilities/Equity	($)	1.68
Net Income/Gross Income	(%)	10.87

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LABOR ANALYSIS

For all farms in the summary, the labor required is estimated to be 2.61 man equivalents, composed of 1.29 operator and family and 1.32 hired man equivalents.

For each man equivalent, 23 cows were maintained producing for sale 127,133 litres of milk valued at $57,477.00.

Labor Income per Man Equivalent for Operator and Family Labor was $7,591.00.

TABLE F-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	61
Operator & Family Man Equivalents	(#)	1.29
Hired Man Equivalents	(#)	1.32
Total Man Equivalents	(#)	2.61
Cows per Man Equivalent	(#)	23
Milk Sold per Man Equivalent	(L)	127,133
Milk Sold per Man Equivalent	($)	57,477
Labor Income per Man Equivalent Operator & Unpaid Family	($)	7,591

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ANALYSIS OF EXPENSES

A review of the costs associated with producing milk indicates that at the Net Farm Income level, Purchased Dairy Feed accounted for 25.4 percent of Total Expenses. Other major expense items included - Depreciation at 11.5 percent, Interest at 8.7 percent, Hired Labor at 8.4 percent and Miscellaneous at 7.8 percent of Total Expenses.

TABLE F-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 90.	3.3 %
Dairy Feed	683.	25.4
Livestock Purchased	78.	2.9
Vet & Drugs	31.	1.2
Breeding	31.	1.2
Dairy Supplies	62.	2.3
Milk Marketing	139.	5.2
Crop Expenses	180.	6.7
Building and Fence Repairs	63.	2.3
Utilities	74.	2.7
Tractor and Machinery Expenses	163.	6.0
Truck and Auto Expenses	58.	2.2
Interest	236.	8.7
Hired Labor	227.	8.4
Taxes	17.	0.6
Insurance	42.	1.6
Miscellaneous	210.	7.8
Depreciation	311.	11.5
TOTAL EXPENSES	$2,694.	100.0 %

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RECEIPTS AND EXPENSES SUMMARY

Information contained in the table below is presented on a per cow, per hectolitre and a per hundredweight milk sold basis.

TABLE F-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER HECTOLITRE	PER CWT
RECEIPTS:			
Fluid Milk Sales	$1,740.	$ 32.01	$14.10
Manufactured Milk Sales	617.	11.36	5.01
Milk Subsidy	100.	1.84	0.81
Livestock Sales	218.	4.02	1.77
Crop Sales	49.	0.90	0.39
Miscellaneous Sales	210.	3.86	1.70
TOTAL FARM RECEIPTS	$2,934.	$ 53.99	$23.78
Adj. for Inventory Change	$ 89.	$ 1.63	$ 0.72
TOTAL FARM INCOME	$3,022.	$ 55.62	$24.50
EXPENSES:			
Milk Hauling	$ 90.	$ 1.65	$ 0.73
Dairy Feed	683.	12.57	5.54
Livestock Purchases	78.	1.43	0.63
Vet & Drugs	31.	0.57	0.25
Breeding	31.	0.58	0.25
Dairy Supplies	62.	1.15	0.51
Milk Marketing	139.	2.56	1.13
Crop Expenses	180.	3.30	1.46
Building & Fence Repairs	63.	1.16	0.51
Utilities	74.	1.37	0.60
Tractor & Machinery Expenses	163.	2.99	1.32
Truck & Auto Expenses	58.	1.07	0.47
Interest	236.	4.33	1.91
Hired Labor	227.	4.17	1.84
Taxes	17.	0.32	0.14
Insurance	42.	0.77	0.34
Miscellaneous	210.	3.86	1.70
TOTAL CASH EXPENSES	$2,383.	$ 43.86	$19.32
Depreciation	$ 311.	$ 5.72	$ 2.52
TOTAL FARM EXPENSES	$2,694.	$ 49.57	$21.84
NET FARM INCOME	$ 328.	$ 6.05	$ 2.66

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Section G

Net Farm Income

Analysis

One of the key factors studied when analyzing a farm business is Net Farm Income. This factor is important as it provides the return to the operator for his labor and management skills along with a return to Equity capital in the business. A study of the various groupings below can provide some indication of why there are such wide variations in the Net Farm Incomes of the farms in this summary.

The one hundred and thirty (130) farms in the summary were re-organized into three groupings based on Net Farm Income per cow. These groups were - (1) the high 25 percent Net Farm Income per Cow Farms, (2) the middle 50 percent Net Farm Income per Cow Farms and (3) the low 25 percent Net Farm Income per Cow Farms.

Similar assumptions regarding Interest on Equity, Operator and Family Labor were made for this section as were made throughout the summary.

Table G-1 provides data on a per farm basis while Table G-2 provides the data on a per cow basis.

A review of the tables shows that the High Net Farm Income per Cow group received a return to all factors of production at the assumed levels. The middle and low groups did not receive a return sufficient to meet all costs.

The High Net Farm Income Group had Net Income per Cow of $799., while the middle and low groups averaged $293. and -$(74.) respectfully.

Return on Equity averaged 15.6 percent for the high group, while the low group received no return to equity.

Net Income as a percent of Gross Income averaged 23.6 percent for the high group and -0- percent for the low group.

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TABLE G-1

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER FARM ANALYSIS

ITEM	HIGH N.F.I./FARM	MEDIUM N.F.I./FARM	LOW N.F.I./FARM
RECEIPTS:			
Fluid Milk	$ 115,610.	$ 101,556.	$ 105,858.
Industrial Milk	45,022.	35,271.	35,193.
Milk Subsidies	7,229.	5,655.	5,812.
Livestock Sales	16,315.	12,137.	12,718.
Crop Sales	3,806.	2,560.	2,965.
Miscellaneous Sales	14,991.	10,075.	16,217.
TOTAL CASH RECEIPTS	$ 202,972.	$ 167,253.	$ 178,764.
Adj. for Inventory Change	$ 7,995.	$ 3,646.	$ 6,454.
TOTAL FARM RECEIPTS	$ 210,967.	$ 170,898.	$ 185,219.
EXPENSES:			
Milk Hauling	$ 6,231.	$ 5,170.	$ 5,327.
Dairy Feed	43,947.	39,187.	44,382.
Livestock Purchases	3,426.	5,266.	4,998.
Vet and Drugs	2,091.	1,616.	2,231.
Breeding	2,315.	1,729.	1,891.
Dairy Supplies	3,715.	3,855.	3,774.
Milk Marketing	10,599.	7,916.	7,506.
Crop Expenses	11,360.	10,340.	11,784.
Building & Fence Repair	3,857.	3,652.	4,245.
Utilities	4,336.	4,166.	5,470.
Tractor & Machinery Repair	9,312.	9,463.	11,469.
Truck & Auto Expense	3,843.	3,310.	3,714.
Interest	11,376.	12,941.	20,283.
Hired Labor	11,372.	12,912.	18,175.
Taxes	1,175.	998.	1,036.
Insurance	2,542.	2,331.	3,075.
Miscellaneous	10,728.	11,790.	16,919.
TOTAL CASH EXPENSES	$ 142,225.	$ 136,641.	$ 166,277.

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TABLE G-1 (Cont'd)

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER FARM ANALYSIS

ITEM		HIGH N.F.I./FARM	MEDIUM N.F.I./FARM	LOW N.F.I./FARM
Building Depreciation		$ 4,736.	$ 4,804.	$ 6,317.
Machinery Depreciation		14,281.	11,904.	17,174.
TOTAL DEPRECIATION		$ 19,016.	$ 16,707.	$ 23,492.
TOTAL FARM EXPENSES		$ 161,241.	$ 153,349.	$ 189,768.
NET FARM INCOME		$ 49,725.	$ 17,549.	$ -(4,550.)
Total Farm Expense		$ 161,241.	$ 153,349.	$ 189,768.
Plus: Interest on Equity		16,672.	9,549.	5,248.
Unpaid Family Labor		903.	475.	430.
Operator Labor		16,825.	13,322.	12,441.
Less: Sales (Excl. Milk)		35,111.	24,771.	31,900.
NET COST OF PRODUCING MILK		$ 160,531.	$ 151,923.	$ 175,987.
Number of Farms	(#)	32	66	32
Number of Cows/Farm	(#)	62	60	62
Litres of Milk/Farm	(L)	373,855	314,430	323,681
Price of Milk/HL	($)	44.90	45.31	45.37
Cost of Producing Milk/HL	($)	42.94	48.32	54.37
NET RETURN/HL	($)	1.96	-(3.00)	-(9.00)
Investment/Farm	($)	307,151	249,232	295,088
Liabilities/Farm	($)	140,429	153,742	242,613
Feed Cost/HL Milk Sold	($)	11.76	12.46	13.71
Equity in Business	(%)	54.3	38.3	17.8
Return on Equity	(%)	15.6	6.0	-0-
Return on Invested Capital	(%)	14.5	6.9	1.1
Net Income/Gross Income	(%)	23.6	10.3	-0-

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TABLE G-2

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER COW ANALYSIS

ITEM	HIGH N.F.I./COW	MEDIUM N.F.I./COW	LOW N.F.I./COW
RECEIPTS:			
Fluid Milk	$ 1,857.	$ 1,693.	$ 1,714.
Industrial Milk	723.	588.	570.
Milk Subsidies	116.	94.	94.
Livestock Sales	262.	202.	206.
Crop Sales	61.	43.	48.
Miscellaneous Sales	241.	168.	263.
TOTAL CASH RECEIPTS	$ 3,261.	$ 2,788.	$ 2,895.
Adj. for Inventory Change	$ 128.	$ 61.	$ 105.
TOTAL FARM RECEIPTS	$ 3,389.	$ 2,849.	$ 2,999.
EXPENSES:			
Milk Hauling	$ 100.	$ 86.	$ 86.
Dairy Feed	706.	653.	719.
Livestock Purchases	55.	88.	81.
Vet & Drugs	34.	27.	36.
Breeding	37.	29.	31.
Dairy Supplies	60.	64.	61.
Milk Marketing	170.	132.	122.
Crop Expenses	182.	172.	191.
Building & Fence Repair	62.	61.	69.
Utilities	70.	69.	89.
Tractor & Machinery Repair	150.	158.	186.
Truck & Auto Expense	62.	55.	60.
Interest	183.	216.	328.
Hired Labor	183.	215.	294.
Taxes	19.	17.	17.
Insurance	41.	39.	50.
Miscellaneous	172.	197.	274.
TOTAL CASH EXPENSES	$ 2,285.	$ 2,278.	$ 2,693.

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TABLE G-2 (Cont'd)

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER COW ANALYSIS

ITEM		HIGH N.F.I./COW	MEDIUM N.F.I./COW	LOW N.F.I./COW
Building Depreciation		$ 76.	$ 80.	$ 102.
Machinery Depreciation		229.	198.	278.
TOTAL DEPRECIATION		$ 305.	$ 279.	$ 380.
TOTAL FARM EXPENSES		$ 2,590.	$ 2,556.	$ 3,073.
NET FARM INCOME		$ 799.	$ 293.	$ -(74.)
Total Farm Expenses		$ 2,590.	$ 2,556.	$ 3,073.
Plus: Interest on Equity		268.	159.	85.
Unpaid Family Labor		15.	8.	7.
Operator Labor		270.	222.	201.
Less: Sales (Excl. Milk)		564.	413.	517.
NET COST OF PRODUCING MILK		$ 2,579.	$ 2,533.	$ 2,850.
Number of Farms	(#)	32	66	32
Number of Cows/Farm	(#)	62	60	62
Litres of Milk/Cow	(L)	6,006	5,242	5,242
Price of Milk/HL	($)	44.90	45.31	45.37
Cost of Producing Milk/HL	($)	42.94	48.32	54.37
NET RETURN/HL	($)	1.96	-(3.00)	-(9.00)
Investment/Cow	($)	4,934	4,004	4,740
Liabilities/Cow	($)	2,256	2,470	3,897
Feed Cost/HL Milk Sold	($)	11.76	12.46	13.71
Equity in Business	(%)	54.3	38.3	17.8
Return on Equity	(%)	15.6	6.0	-0-
Return on Invested Capital	(%)	14.5	6.9	1.1
Net Income/Gross Income	(%)	23.6	10.3	-0-

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Section H

Production

Analysis

In the management of a business, output per unit of input is one of the key elements to the success of that business. In the dairy business, production per farm or more particularily, production per cow is one of the key factors determining the profitability of the farm business.

In this section of the summary, farms were reclassified according to production levels on a per cow basis. Three (3) levels were chosen as follows: (1) high 25 percent production per cow farms, (2) middle 50 percent production per cow farms and (3) low 25 percent production per cow farms.

Assumptions regarding Operator and Family Labor and Interest on Equity were the same as used elsewhere in this summary.

Tables H-1 and H-2 present information on a per farm and per cow basis.

In analyzing the information found in the Tables, it is noted that the high production per cow farms came closest to achieving a return to all factors of production. The high production group were $0.96 short of this objective.

The high production group had production of 6,520 litres per cow while the low production group averaged 4,209 litres per cow.

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TABLE H-1

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARMS

PER FARM ANALYSIS

ITEM	HIGH PROD./FARM	MEDIUM PROD./FARM	LOW PROD./FARM
RECEIPTS:			
Fluid Milk	$ 140,153.	$ 106,732.	$ 70,641.
Industrial Milk	43,950.	41,324.	23,781.
Milk Subsidies	7,111.	6,648.	3,881.
Livestock Sales	18,781.	13,415.	7,615.
Crop Sales	5,844.	2,027.	2,025.
Miscellaneous Sales	15,130.	14,122.	7,731.
TOTAL CASH RECEIPTS	$ 230,969.	$ 184,267.	$ 115,674.
Adj. for Inventory Change	$ 5,849.	$ 5,236.	$ 5,319.
TOTAL FARM RECEIPTS	$ 236,819.	$ 189,503.	$ 120,993.
EXPENSES:			
Milk Hauling	$ 6,745.	$ 5,764.	$ 3,586.
Dairy Feed	50,992.	44,460.	26,461.
Livestock Purchases	5,198.	5,377.	2,996.
Vet & Drugs	2,699.	1,911.	1,014.
Breeding	2,675.	1,986.	1,002.
Dairy Supplies	4,145.	4,088	2,863.
Milk Marketing	10,109.	8,879.	6,010.
Crop Expenses	14,094.	11,553.	6,548.
Building & Fence Repair	5,501.	3,676.	2,552.
Utilities	5,104.	4,779.	3,437.
Tractor & Machinery Repair	11,281.	11,022.	6,285.
Truck & Auto Expense	4,272.	3,540.	2,810.
Interest	15,472.	16,080.	9,714.
Hired Labor	18,618.	13,715.	9,273.
Taxes	1,306.	1,053.	789.
Insurance	2,887.	2,717.	1,934.
Miscellaneous	17,176.	12,926.	8,129.
TOTAL CASH EXPENSES	$ 178,272.	$ 153,527.	$ 95,403.

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TABLE H-1 (Cont'd)

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARMS

PER FARM ANALYSIS

ITEM		HIGH PROD./FARM	MEDIUM PROD./FARM	LOW PROD./FARM
Building Depreciation		$ 6,896.	$ 4,916.	$ 3,925.
Machinery Depreciation		16,997.	14,901.	8,277.
TOTAL DEPRECIATION		$ 23,893.	$ 19,817.	$ 12,202.
TOTAL FARM EXPENSES		$ 202,165.	$ 173,344.	$ 107,605.
NET FARM INCOME		$ 34,654.	$ 16,159.	$ 13,388.
Total Farm Expenses		$ 202,165.	$ 173,344.	$ 107,605.
Plus: Interest on Equity		16,065.	8,063.	8,920.
Unpaid Family Labor		726.	642.	262.
Operator Labor		16,067.	13,540.	12,824.
Less: Sales (Excl. Milk)		39,755.	29,564.	17,371.
NET COST OF PRODUCING MILK		$ 195,268.	$ 166,026.	$ 112,239.
Number of Farms	(#)	32	66	32
Number of Cows/Farm	(#)	65	64	51
Litres of Milk/Farm	(L)	423,609	342,967	215,071
Price of Milk/HL	($)	45.14	45.11	45.71
Cost of Producing Milk/HL	($)	46.10	48.41	52.19
NET RETURN/HL	($)	-(.96)	-(3.30)	-(6.48)
Feed Cost/HL Milk Sold	($)	12.04	12.96	12.30
Feed Cost as % of Total Costs	(%)	25.2	25.6	24.6
Feed Cost as % of Milk Sales	(%)	26.7	28.7	26.9
Kilograms of Feed/HL Milk Sold	(KGS)	44.54	48.85	46.52

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TABLE H-2

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARM

PER COW ANALYSIS

ITEM	HIGH PROD./COW	MEDIUM PROD./COW	LOW PROD./COW
RECEIPTS:			
Fluid Milk	$ 2,157.	$ 1,672.	$ 1,385.
Industrial Milk	676.	647.	465.
Milk Subsidies	109.	104.	78.
Livestock Sales	289.	219.	144.
Crop Sales	90.	32.	40.
Miscellaneous Sales	235.	221.	151.
TOTAL CASH RECEIPTS	$ 3,555.	$ 2,887.	$ 2,264.
Adj. for Inventory Change	$ 90.	$ 87.	$ 104.
TOTAL FARM RECEIPTS	$ 3,645.	$ 2,984.	$ 2,368.
EXPENSES:			
Milk Hauling	$ 104.	$ 90.	$ 70.
Dairy Feed	785.	697.	518.
Livestock Purchases	80.	84.	54.
Vet & Drugs	42.	30.	20.
Breeding	41.	31.	20.
Dairy Supplies	64.	64.	56.
Milk Marketing	156.	134.	118.
Crop Expenses	217.	181.	128.
Building & Fence Repair	85.	58.	50.
Utilities	79.	75.	67.
Tractor & Machinery Repair	174.	173.	123.
Truck & Auto Expense	66.	55.	50.
Interest	238.	252.	190.
Hired Labor	287.	215.	181.
Taxes	20.	17.	15.
Insurance	44.	43.	38.
Miscellaneous	264.	202.	159.
TOTAL CASH EXPENSES	$ 2,744.	$ 2,405.	$ 1,867.

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TABLE H-2 (Cont'd)

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARMS

PER COW ANALYSIS

ITEM		HIGH PROD./COW	MEDIUM PROD./COW	LOW PROD./COW
Building Depreciation		$ 106.	$ 77.	$ 77.
Machinery Depreciation		262.	233.	162.
TOTAL DEPRECIATION		$ 368.	$ 310.	$ 239.
TOTAL FARM EXPENSES		$ 3,112.	$ 2,716.	$ 2,106.
NET FARM INCOME		$ 533.	$ 253.	$ 262.
Total Farm Expense		$ 3,112.	$ 2,716.	$ 2,106.
Plus: Interest on Equity		247.	126.	175.
Unpaid Family Labor		11.	10.	5.
Operator Labor		247.	212.	251.
Less: Sales (Excl. Milk)		612.	463.	340.
NET COST OF PRODUCING MILK		$ 3,006.	$ 2,601.	$ 2,197.
Number of Farms	(#)	32	66	32
Number of Cows/Farm	(#)	65	64	51
Litres of Milk/Cow	(L)	6,520	5,373	4,209
Price of Milk/HL	($)	45.14	45.11	45.71
Cost of Producing Milk/HL	($)	46.10	48.41	52.19
NET RETURN/HL	($)	-(.96)	-(3.30)	-(6.48)
Feed Cost/HL Milk Sold	($)	12.04	12.96	12.30
Feed Cost as % of Total Costs	(%)	25.2	25.6	24.6
Feed Cost as % of Milk Sales	(%)	26.7	28.7	26.9
Kilograms of Feed/HL Milk Sold	(KGS)	44.54	48.85	46.52

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Section I

Investment

Analysis

The level of capital investment in a business can be an important factor in determining the profitability of that business. In this section of the summary, farms are re-grouped into three (3) classifications as follows: (1) the high 25 percent Investment per Cow Farms, (2) the middle 50 percent Investment per Cow Farms and (3) the low 25 percent Investment per Cow Farms.

Similar assumptions regarding Operator and Family Labor and Return on Equity were used for this section as were made throughout this summary.

Table I-1 provides data on a per farm basis, while Table I-2 provides data on a per cow basis.

The information contained in the tables reveals that no group received a return to all factors of production at the assumed levels. However, the Low Investment per Cow group came closest to achieving a positive return.

Investment per cow averaged $4,361. for the Low Investment per Cow group and $6,868. for the High Investment per Cow group.

All groups received a Return to Equity ranging from 2.4 percent for the High Investment per Cow group to 13.8 percent for the Low Investment per Cow group.

Net Income as a percent of Gross Farm Income ranged from 8.6 percent for the High Investment per Cow group to 12.2 percent for the Low Investment per Cow group.

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TABLE I-1

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER FARM ANALYSIS

ITEM	HIGH INVEST./FARM	MEDIUM INVEST./FARM	LOW INVEST./FARM
RECEIPTS:			
Fluid Milk	$ 91,517.	$ 108,737.	$ 115,140.
Industrial Milk	32,368.	37,058.	44,162.
Milk Subsidies	5,372.	6,085.	6,781.
Livestock Sales	13,456.	13,930.	11,879.
Crop Sales	2,495.	3,249.	2,854.
Miscellaneous Sales	11,230.	14,740.	10,354.
TOTAL CASH RECEIPTS	$ 156,439.	$ 183,800.	$ 191,169.
Adj. for Inventory Change	$ 3,693.	$ 7,108.	$ 3,615.
TOTAL FARM RECEIPTS	$ 160,132.	$ 190,907.	$ 194,784.
EXPENSES:			
Milk Hauling	$ 4,766.	$ 5,587.	$ 5,931.
Dairy Feed	34,739.	42,849.	46,036.
Livestock Purchases	4,833.	5,662.	2,773.
Vet & Drugs	1,780.	1,949.	1,857.
Breeding	1,875.	1,805.	2,175.
Dairy Supplies	3,460.	3,779.	4,186.
Milk Marketing	7,401.	8,431.	9,642.
Crop Expenses	9,199.	11,725.	11,088.
Building & Fence Repair	3,203.	4,115.	3,945.
Utilities	4,060.	4,673.	4,699.
Tractor & Machinery Repair	7,842.	10,394.	11,018.
Truck & Auto Expense	3,413.	3,774.	3,186.
Interest	16,429.	14,567.	11,876.
Hired Labor	11,470.	13,849.	16,143.
Taxes	968.	1,101.	1,029.
Insurance	2,352.	2,787.	2,325.
Miscellaneous	8,588.	13,046.	16,468.
TOTAL CASH EXPENSES	$ 126,378.	$ 150,095.	$ 154,376.

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TABLE I-1 (Cont'd)

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER FARM ANALYSIS

ITEM		HIGH INVEST./FARM	MEDIUM INVEST./FARM	LOW INVEST./FARM
Building Depreciation		$ 5,855.	$ 5,497.	$ 3,769.
Machinery Depreciation		14,128.	14,089.	12,822.
TOTAL DEPRECIATION		$ 19,982.	$ 19,585.	$ 16,591.
TOTAL FARM EXPENSES		$ 146,360.	$ 169,680.	$ 170,967.
NET FARM INCOME		$ 13,772.	$ 21,227.	$ 23,817.
Total Farm Expense		$ 146,360.	$ 169,680.	$ 170,967.
Plus: Interest on Equity		12,637.	10,335.	7,661.
Unpaid Family Labor		489.	679.	422.
Operator Labor		12,788.	14,218.	14,645.
Less: Sales (Excl. Milk)		27,182.	31,919.	25,087.
NET COST OF PRODUCING MILK		$ 145,093.	$ 162,993.	$ 168,607.
Number of Farms	(#)	32	66	32
Number of Cows/Farm	(#)	49	62	71
Litres of Milk/Farm	(L)	286,362	334,667	369,436
Price of Milk/HL	($)	45.14	45.38	44.96
Cost of Producing Milk/HL	($)	50.67	48.70	45.64
NET RETURN/HL	($)	-(5.53)	-(3.32)	-(0.68)
Investment/Farm	($)	334,194	276,322	212,171
Liabilities/Farm	($)	207,822	172,968	135,566
Feed Cost/HL Milk Sold	($)	12.13	12.80	12.46
Equity in Business	(%)	37.8	37.4	36.1
Return on Equity	(%)	2.4	3.7	13.8
Return on Invested Capital	(%)	5.2	7.8	9.9
Net Income/Gross Income	(%)	8.5	11.1	12.2

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TABLE I-2

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER COW ANALYSIS

ITEM	HIGH INVEST./COW	MEDIUM INVEST./COW	LOW INVEST./COW
RECEIPTS:			
Fluid Milk	$ 1,881.	$ 1,745.	$ 1,632.
Industrial Milk	665.	595.	626.
Milk Subsidies	110.	98.	96.
Livestock Sales	277.	224.	168.
Crop Sales	51.	52.	40.
Miscellaneous Sales	231.	237.	147.
TOTAL CASH RECEIPTS	$ 3,215.	$ 2,950.	$ 2,709.
Adj. for Inventory Change	$ 76.	$ 114.	$ 51.
TOTAL FARM RECEIPTS	$ 3,291.	$ 3,064.	$ 2,760.
EXPENSES:			
Milk Hauling	$ 98.	$ 90.	$ 84.
Dairy Feed	714.	688.	652.
Livestock Purchases	99.	91.	39.
Vet & Drugs	37.	31.	26.
Breeding	39.	29.	31.
Dairy Supplies	71.	61.	59.
Milk Marketing	152.	135.	137.
Crop Expenses	189.	188.	157.
Building & Fence Repair	66.	66.	56.
Utilities	83.	75.	67.
Tractor & Machinery Repair	161.	167.	156.
Truck & Auto Expense	70.	61.	45.
Interest	338.	234.	168.
Hired Labor	236.	222.	229.
Taxes	20.	18.	15.
Insurance	48.	45.	33.
Miscellaneous	177.	209.	233.
TOTAL CASH EXPENSES	$ 2,597.	$ 2,409.	$ 2,188.

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TABLE I-2 (Cont'd)

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER COW ANALYSIS

ITEM		HIGH INVEST./COW	MEDIUM INVEST./COW	LOW INVEST./COW
Building Depreciation		$ 120.	$ 88.	$ 53.
Machinery Depreciation		290.	226.	182.
TOTAL DEPRECIATION		$ 411.	$ 314.	$ 235.
TOTAL FARM EXPENSES		$ 3,008.	$ 2,723.	$ 2,423.
NET FARM INCOME		$ 283.	$ 341.	$ 338.
Total Farm Expense		$ 3,008.	$ 2,723.	$ 2,423.
Plus: Interest on Equity		260.	166.	109.
Unpaid Family Labor		10.	11.	6.
Operator Labor		263.	228.	208.
Less: Sales (Excl. Milk)		559.	512.	356.
NET COST OF PRODUCING MILK		$ 2,982.	$ 2,616.	$ 2,389.
Number of Farms	(#)	32	66	32
Number of Cows/Farm	(#)	49	62	71
Litres of Milk/Cow	(L)	5,885	5,372	5,236
Price of Milk/HL	($)	45.14	45.38	44.96
Cost of Producing Milk/HL	($)	50.67	48.70	45.64
NET RETURN/HL	($)	-(5.53)	-(3.32)	-(0.68)
Investment/Cow	($)	6,868	5,679	4,361
Liabilities/Cow	($)	4,271	3,555	2,786
Feed Cost/HL Milk Sold	($)	12.13	12.80	12.46
Equity in Business	(%)	37.8	37.4	36.1
Return on Equity	(%)	2.4	3.7	13.8
Return on Invested Capital	(%)	5.2	7.8	9.9
Net Income/Gross Income	(%)	8.5	11.1	12.2

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Section J

Summary

The 1983 Nova Scotia Dairy Farm Business Summary provides basic information and statistics on the costs and returns associated with the dairy enterprise on Nova Scotia farms. While not based on a statistically sound random sample of dairy farms, the summary can be used with care to assist in the analysis of the dairy enterprise by providing group average data for comparison purposes.

Table J-1 provides a brief summary of a number of cost and profit ratios and management factors that are often used when analyzing a farm business. These ratios and management factors provide useful information about the financial and production strength of the farm business. In addition, weaknesses in the farm business can also be pin pointed through an analysis of these ratios and management factors.

In reviewing these ratios and management factors, the following points are worthy of comment.

- A total of 130 farms are included in the summary.
- Capital Turnover Ratio is 1.49 years.
- Equity in the farm business varied widely from farm to farm, but averaged 37.3 percent for all farms.
- Return on Equity averaged 5.4 percent with significant variation among farms.
- Net Income to Gross Income varied widely but averaged 10.87 percent.
- Production per cow averaged 5,434 litres of milk sold.

A review of the previous sections showed that no group received a return to all factors of production. The 100+ Cow Group came closest to achieving a return equal to costs, but fell short by $0.16 per hectolitre. When farms were reclassified by various criteria (Net Farm Income, Production and Investment Per Cow), the High Net Income per Cow group did receive a return greater than all costs.

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In compiling the data for this summary, extreme variation among farms was noted. The variation occurred in most factors, including returns, costs and management factors. Below, we list a number of examples of the variation observed.

- Net Farm Income had a range of $2,594. per cow between the highest and lowest net incomes on a per cow basis.
- Investment per cow had a range of $10,276. between the highest and lowest investments on a per cow basis.
- Production per cow varied 4,527 litres per cow between the highest and lowest production per cow basis.
- Feed cost per hectolitre of milk sold varied by $18.85 between the highest and lowest farms.
- Feed consumed per cow varied by 4,841 kilograms of feed per cow between the highest and lowest feed users.

With such wide variation in many of the costs, returns and management factors, it is difficult to isolate specific characteristics that result in a profitable dairy unit. It would appear, however, that a number of the key factors of production such as Production per Cow, Efficient Use of Capital, Efficient Use of Labor and Cost Control are of significant importance in determining the success of the farm unit.

Those farm operators who successfully combined these factors of production in the management and operation of their businesses achieved a reasonable return to their Labor Capital and Management.

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TABLE J-1

COST AND PROFIT RATIOS

ITEM		20 - 39 COWS	40 - 59 COWS	60 - 99 COWS	100+ COWS	ALL FARMS
Number of Farms		34	46	37	13	130
Number of Cows per Farm		33	50	74	137	61
COST RATIOS:						
Variable Cost as % of Total Cost		63	65	66	70	66
Fixed Cost as % of Total Cost		23	20	21	17	20
Opportunity Cost as % of Total Cost		14	15	13	13	14
EARNING & SOLVENCY RATIOS:						
Capital Turnover	(YRS)	1.71	1.56	1.54	1.20	1.49
Farm Equity	(%)	30.0	38.1	35.5	45.8	37.3
Return on Equity	(%)	-0-	5.0	5.6	9.5	5.4
Current Ratio	($)	7.85	7.81	6.22	7.81	7.15
Net Capital Ratio	($)	1.43	1.62	1.55	1.85	1.59
Debt to Equity Ratio	($)	2.34	1.63	1.82	1.18	1.68
Net Income/Gross Income	(%)	8.25	12.04	10.50	11.57	10.87
MANAGEMENT FACTORS:						
Cows/Man Equivalent	(#)	21	22	24	27	23
Milk Sold/Cow	(L)	5160	5339	5579	5508	5434
Milk Sold/Man Equivalent	(L)	106433	118415	131725	150255	127133
Purchased Feed/Cow	($)	679	677	671	712	683
Purchased Feed/Cow	(KGS)	2424	2599	2485	2715	2561
Feed as % of Milk Sold	(%)	28.7	28.2	26.6	28.7	27.8
Feed as % of Total Costs	(%)	25.1	25.9	24.6	25.9	25.4
Feed/HL Milk Sold	(KGS)	46.97	48.67	44.54	49.29	47.13
Feed Cost/HL Milk Sold	($)	13.15	12.68	12.02	12.92	12.57

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Appendix

The Tables in the Appendix outline Per Farm, Per Cow, Per Hectolitre, Per Hundredweight and Percentage figures for all farms combined in this summary.

The Appendix also provides a Glossary of Terms used throughout the Summary. A brief definition or explanation of each term is also provided.

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RECEIPTS AND EXPENSES SUMMARY

ITEM	PER FARM	PER COW
RECEIPTS:		
Fluid Milk	$ 106,075.	$ 1,740.
Industrial Milk	37,652.	617.
Milk Subsidies	6,081.	100.
Livestock Sales	13,308.	218.
Crop Sales	2,966.	49.
Miscellaneous Sales	12,797.	210.
TOTAL CASH RECEIPTS	$ 178,879.	$ 2,934.
Adj. for Inventory Change	$ 5,407.	$ 89.
TOTAL FARM RECEIPTS	$ 184,286.	$ 3,022.
EXPENSES:		
Milk Hauling	$ 5,470.	$ 90.
Dairy Feed	41,637.	683.
Livestock Purchases	4,747.	78.
Vet & Drugs	1,884.	31.
Breeding	1,913.	31.
Dairy Supplies	3,801.	62.
Milk Marketing	8,476.	139.
Crop Expenses	10,946.	180.
Building & Fence Repair	3,849.	63.
Utilities	4,529.	74.
Tractor & Machinery Repair	9,919.	163.
Truck & Auto Expense	3,541.	58.
Interest	14,363.	236.
Hired Labor	13,828.	227.
Taxes	1,051.	17.
Insurance	2,566.	42.
Miscellaneous	12,791.	210.
TOTAL CASH EXPENSES	$ 145,311.	$ 2,383.
Building Depreciation	$ 5,159.	$ 85.
Machinery Depreciation	13,786.	226.
TOTAL DEPRECIATION	$ 18,946.	$ 311.
TOTAL FARM EXPENSE	$ 164,257.	$ 2,694.
NET FARM INCOME	$ 20,030.	$ 328.

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RECEIPTS AND EXPENSES SUMMARY (Cont'd)

	PER 100 LITRES	PER CWT.	PERCENTAGE
	$ 32.01	$ 14.10	57.6
	11.36	5.01	20.4
	1.84	0.81	3.3
	4.02	1.77	7.2
	0.90	0.39	1.6
	3.86	1.70	6.9
	$ 53.99	$ 23.78	97.1
	$ 1.63	$ 0.72	2.9
	$ 55.62	$ 24.50	100.0
	$ 1.65	$ 0.73	3.3
	12.57	5.54	25.3
	1.43	0.63	2.9
	0.57	0.25	1.1
	0.58	0.25	1.2
	1.15	0.51	2.3
	2.56	1.13	5.2
	3.30	1.46	6.7
	1.16	0.51	2.3
	1.37	0.60	2.8
	2.99	1.32	6.0
	1.07	0.47	2.2
	4.33	1.91	8.7
	4.17	1.84	8.4
	0.32	0.14	0.6
	0.77	0.34	1.6
	3.86	1.70	7.8
	$ 43.86	$ 19.32	88.5
	$ 1.56	$ 0.69	3.1
	4.16	1.83	8.4
	$ 5.72	$ 2.52	11.5
	$ 49.57	$ 21.84	100.0
	$ 6.05	$ 2.66	-

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GLOSSARY OF TERMS

ASSETS - All items of value owned by the farm business.

CAPITAL TURNOVER - The length of time, measured in years, that is required to generate sufficient income to equal total capital invested in the farm business. The ratio is Total Capital Invested divided by Total or Gross Farm Income.

CASH EXPENSES - The sum of all cash expenses expended by the farm business during the year. This includes such items as feed, livestock purchased, hired labor, interest and marketing costs.

DEPRECIATION - This is an amount which represents the loss in value of an asset over a certain period of time due to the number of years of remaining life, the amount of use and obsolescence. In this summary, tax depreciation rates are used.

EQUITY - This is the difference between the value of assets and liabilities and represents the value of assets that would remain if all debts were paid off. Further, it represents the capital contribution to the business by the owner.

FARM RECEIPTS - The sum of all cash receipts received by the business during the year. This includes such items as fluid milk sales, livestock sales and miscellaneous sales.

INTERMEDIATE TERM LIABILITIES - This is a debt owed by the business to others with a usual term of from 1 to 10 years.

INVENTORY ADJUSTMENT - This represents an increase or decrease in the value of inventory (livestock, crops, supplies) held by the farm to earn income.

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LABOR AND MANAGEMENT INCOME - This term represents Net Farm Income with an adjustment made for unpaid family labor and interest on equity. It represents a return to the operator for his labor and management skills after all other costs have been deducted.

LIABILITIES - Debts owed by the business to others.

LONG TERM LIABILITIES - Debts of a term greater than 10 years.

MAN EQUIVALENTS - Total number of months of labor including operator, hired and unpaid family labor divided by 12 to reduce the total labor force to the equivalent of the number of men employed on a yearly basis. Further, this figure is adjusted against a charge on a per worker basis, adjusted annually by 7 percent.

NET FARM INCOME - Total Farm Income minus Total Farm Expenses. This represents the return to the farm, the operator and family for labor, management and capital.

RETURN TO EQUITY - This represents the return to the owners capital after adjustments have been made for operator labor. The calculations is: (Net Farm Income - Operator Labor) x 100 Divided by Equity

RETURN TO INVESTED (TOTAL) CAPITAL - This represents the rate of return achieved by the total capital invested in the farm business. The calculation is: (Net Farm Income + Interest Paid - Operator and Family Labor) x 100 Divided by Total Capital Investment (Total Assets)

SHORT TERM LIABILITIES - Debts owed by the business that have a term of less than one (1) year. Short term may also be called Current.

POOR

QUALITY

ORIGINAL